

Attorney Docket # - 10003787-1

In some embodiments, the backside and edge regions of substrate 26 are etched to reduce substantially cross-contamination by ferroelectric materials through shared equipment (e.g. steppers, metrology tools, and the like) (see, e.g. U.S. Application Serial No. 09/925,201, filed August 8, 2001, by Stephen R. Gilbert et al., and entitled "Contamination Control for Embedded Ferroelectric Device Fabrication Processes" [[Attorney Docket No. 10991457-1]]).

Replacement paragraphs for the above amendments are included after the body of this amendment.

In the Claims:

Please delete claims 1-34.

Please add claims 35-70. These claims are included after the body of this amendment as "New Claims."

Remarks

The Applicant is required under 35 U.S.C. §121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. In particular, the Examiner found that the application contains claims directed to the following patentably distinct species of the claimed invention: a first embodiment (Figure 1), a second embodiment (Figure 2), a third embodiment (Figure 3), a fourth embodiment (Figure 4), and a fifth embodiment (Figure 5).

Specification

On page 1, the paragraph between lines 4-12 has been amended to reflect the serial numbers of the U.S. applications recited therein. On page 1, line 27, the "EEPROM" has been replaced by -EEPROM-. No new matter has been introduced with this amendment. On page 8, the paragraph between lines 3-16 has been amended to reflect the serial number of the U.S. application recited therein. On page 9, the paragraph between lines 18-23 has been amended to reflect the serial number of the U.S. application recited therein.

No new matter is being introduced with any of these amendments.

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Species Election

Applicant respectfully replaces claims 1-34 with claims 35-70. These claims are attached as **New Claims**.

Independent claims 35 and 53 correspond to the genus.

- Species I (Figure 1) - Claims 39-41, 57-59 – embodiments with oversized vias through ferroelectric device level
- Species II (Figure 2) - Claims 42-46, 60-64 – embodiments with ferroelectric device level formed over metallization layer
- Species III (Figure 3) - Claims 47-49, 65-67 – embodiments with ferroelectric device level formed over metallization and inter-level dielectric levels
- Species IV (Figure 4) - Claims 51-53, 68-70 – embodiments with vias extending through the ferroelectric device level and the transistor level
- Species V (Figure 5) - Claims 36-41, 54-59 – embodiments with integrated metallization and ferroelectric device levels

Applicants elect Species V with traverse. The present invention is related to the placement of the ferroelectric device level with respect to a first metal layer and a interlevel dielectric layer. Newly added claimd 35 and 53 include a ferroelectric structure that includes one or more ferroelectric capacitors. The ferroelectric structure includes:

- the ferroelectric device level and overlying ferroelectric isolation layer having one or more vias extending therethrough
- a first metal layer
- an inter-level dielectric level

As outlined in the list above, Species I-V disclose combinations of these layers within the ferroelectric structure. Originally filed claims 1-34 and Figures 1-5 support this amendment. No new matter is being introduced with this amendment. Claims 35-70 are believed to be in condition for allowance.

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Conclusion

If the Examiner has any further questions or would like to discuss this application in more detail, he is invited to call the applicant's agent at the telephone number given below. The applicant respectfully suggests that the claims presently in the application are distinct over the prior art and that the application is now in condition for allowance. Accordingly, the applicant solicits favorable action.

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Respectfully submitted,

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